size of adults made no attempt to run away when approached. By contrast, the chicks of African Skimmers *Rynchops flavirostris* are described to 'run from the scrape, flatten out on the sand and remain still' in response to danger (Coppinger *et al.* 1988).

Threats and disturbance

During the June visit, the river had dried considerably and the large island with the skimmer colony had become connected to one of the banks by a sandbank. Goats and cattle had grazed on the island, and may have trampled over eggs and chicks. Dogs were seen to eat nestlings, and possibly eggs. One chick was found bleeding on the head from a cut, perhaps caused by either trampling or a bite. The damming of the river Chambal upstream in Rajasthan, and an irrigation project, have led to markedly lower levels of water during the dry season in recent years, causing the river to dry up completely in parts. This reduces the availability of islands for skimmers, or makes the islands more accessible from the banks. In 2001, the water level was very low during the nesting season and no skimmer nests were found in the NCS (NCS forest staff verbally 2003). Disturbance from planned development such as proposed railway and road bridges, and increased removal of water for irrigation further threatens skimmer habitat in the area. It is crucially important that deep water and river flow is maintained, so that suitable nesting islands remain isolated by water throughout the breeding season. These issues need addressing if the species is to be conserved effectively in the sanctuary.

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First record of Christmas Island Frigatebird *Fregata andrewsi* for Timor-Leste (East Timor)

COLIN R. TRAINOR

There are only three acceptable records of the Critically Endangered Christmas Island Frigatebird *Fregata andrewsi* for Wallacea, all from the Lesser Sunda islands of Lombok, Semau (off Timor) and West Timor (McKean 1987, Johnstone *et al.* 1993, Coates and Bishop 1997, BirdLife International 2001). Here I describe the first record for the new nation of Timor-Leste (East Timor).

At 15h30 on 1 March 2003, four frigatebirds were observed in flight over the Dili harbour area. The birds were observed from a distance of 40–50 m without the aid of binoculars and were not identified. During a prolonged period of strong wind (c.40–50 km/h) they continued to fly over beach-front habitat near the Hotel Tourismo, heading towards Cape Cristo Rei (8°31′26″S 125°36′33″E), 5 km north-east of Dili.

I collected my binoculars and took a taxi to Cristo Rei beach. Between 16h30 and 17h15 a total of 17 frigatebirds were observed as they soared, singly, in pairs and a party of five, towards the cape, where they gathered in a loose group before soaring east along the coast at c.17h30. One pair of birds soaring about 60 m directly above my head included an all-black male Great Frigatebird *Fregata minor*, together with a male Christmas Island Frigatebird. The latter was identified by its dark (perhaps black) bill, black neck, chest, upper

belly and underwing, with a striking white lower belly. It was clearly an adult. At least one female Great Frigatebird was identified in the group. Several females with white spurs on the axillary feathers were also observed, however I could not determine whether they were Lesser Frigatebird *Fregata ariel* or Christmas Island Frigatebird (possibly both were present).

Frigatebirds are regular along the coast near Dili with observations of small numbers every few days in the period March–May 2003. A large group of up to 150 individuals was frequently seen at Manatutu. The only other record of Christmas Island Frigatebird for Timor was also of a single adult male, observed along the coast near Kupang on 26 June 1986 (McKean 1987).

The Christmas Island Frigatebird is considered a vagrant to the Lesser Sundas (BirdLife International 2001). However it should be emphasised that limited and highly sporadic effort has been expended by ornithologists along the coasts of these islands. Further, this ornithological note is the first based on direct observations in Timor-Leste since 1973 (McKean *et al.* 1975, see also Trainor and Soares 2004, this issue).

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Diet of Houbara Bustard *Chlamydotis undulata* in Punjab, Pakistan

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Houbara Bustard *Chlamydotis undulata* (taxonomic treatment follows BirdLife International 2004) ranges from North Africa, through the Middle East to Mongolia. In Pakistan, where the present study was carried out, it is largely a winter visitor (Cramp 1980, Roberts 1991–1992). The species is omnivorous, eating fruit, seeds, shoots, leaves and flowers, with animal prey including locusts, grasshoppers, mole-crickets, and beetles (Cramp 1980). Here we describe gizzard contents of Houbara Bustards collected in Punjab, Pakistan.

METHODS

A total of 34 Houbara Bustard gizzards were collected during 1999–2000 from hunting parties and local trappers in Rajanpur/Rojhan, Thal and Cholistan regions, Punjab, to determine the food preferences. Samples were immediately fixed in 10% formaldehyde. Unfortunately it was not possible to record mass, age and sex of the birds. Plant and animal matter of contents were separated, weighed and identified in the Botany and Zoology Departments, University of the Punjab, Lahore.

RESULTS

Most of the matter found in the Houbara Bustard gizzards was plant material (78% by mass). Parts of seeds, leaves, flowers and young shoots of 19 plant species belonging to 11 families were identified (Table 1). The most frequent included *Dipterygium glaucum* (91% of samples and 40% of total dry mass), *Capparis decidua* (65% and 2.7% respectively), *Haloxylon salicornicum* (35% and 1.7%) and *Farsetia hamiltonii* (32% and 11%). Among the animal matter, the most frequent species was *Adesmia aenescens* (94% of samples and 11% of total dry mass), *Pimelia indica* (24% and 2.2% respectively), and *Arthrodosis* sp. (21% and 2.5%). The proportion of animal matter appeared to increase from October to February (Table 2).

DISCUSSION

The results presented here accord well with other studies of Houbara Bustard diet. In Pakistan, Mirza (1971) analysed gizzard contents of 100 individuals, and reported that 88% of samples contained both plant matter (including the genera *Haloxylon, Farsetia, Fagonia, Tribulus, Zygophyllum,* and *Crotalaria*) and animal matter (including insects such as grasshoppers